

B. When a community proposes to permit the following encroachments:

- any development that causes a rise in the base flood elevations within the floodway; or
- any development occurring in Zones A1-30 and Zone AE without a designated floodway, which will cause a rise of more than one foot in the base flood elevation; or
- alteration or relocation of a stream (including but not limited to installing culverts and bridges)

the applicant shall (as per 44 CFR Part 65.12):

1. apply to FEMA for conditional approval of such action prior to permitting the encroachments to occur.
2. Upon receipt of the Administrator's conditional approval of map change and prior to approving the proposed encroachments, a community shall provide evidence to FEMA of the adoption of floodplain management ordinances incorporating the increased base flood elevations and / or revised floodway reflecting the post-project condition.
3. Upon completion of the proposed encroachments, a community shall provide as-built certifications. FEMA will initiate a final map revision upon receipt of such certifications in accordance with 44 CFR Part 67.

C. Any new construction, development, uses or activities allowed within any identified floodplain area shall be undertaken in strict compliance with the provisions contained in this Ordinance and any other applicable codes, ordinances and regulations.

Section 5.02 Elevation and Floodproofing Requirements

A. Residential Structures

1. In AE, A1-30, and AH Zones, any new construction or substantial improvement shall have the lowest floor (including basement) elevated up to, or above, the regulatory flood elevation.
2. In A Zones, where there are no Base Flood Elevations specified on the FIRM, any new construction or substantial improvement shall have the lowest floor (including basement) elevated up to, or above, the regulatory flood elevation determined in accordance with Section 4.02.C of this ordinance.
3. The design and construction standards and specifications contained in the 2009 International Building Code (IBC) and in the 2009 International Residential Code (IRC) or the most recent revisions thereof and ASCE 24 and 34 PA Code (Chapters 401-405 as amended) shall be utilized, where they are more restrictive.

B. Non-residential Structures

1. In AE, A1-30 and AH Zones, any new construction or substantial improvement of a non-residential structure shall have the lowest floor (including basement) elevated up to, or above, the regulatory flood elevation, or be designed and constructed so that the space enclosed below the regulatory flood elevation:
 - a. is floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water and,
 - b. has structural components with the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy:
2. In A Zones, where no Base Flood Elevations are specified on the FIRM, any new construction or substantial improvement shall have the lowest floor (including basement) elevated or completely floodproofed up to, or above, the regulatory flood elevation determined in accordance with Section 4.02.C of this ordinance.
3. Any non-residential structure, or part thereof, made watertight below the regulatory flood elevation shall be floodproofed in accordance with the W1 or W2 space classification standards contained in the publication entitled "Flood-Proofing Regulations" published by the U.S. Army Corps of Engineers (June 1972, as amended March 1992) or with some other equivalent standard. All plans and specifications for such floodproofing shall be accompanied by a statement certified by a registered professional engineer or architect which states that the proposed design and methods of construction are in conformance with the above referenced standards.
4. The design and construction standards and specifications contained in the 2009 International Building Code (IBC) and in the 2009 International Residential Code (IRC) or the most recent revisions thereof and ASCE 24 and 34 PA Code (Chapters 401-405 as amended) shall be utilized, where they are more restrictive.

C. Space below the lowest floor

1. Fully enclosed space below the lowest floor (excluding basements) which will be used solely for the parking of a vehicle, building access, or incidental storage in an area other than a basement, shall be designed and constructed to allow for the automatic entry and exit of flood waters for the purpose of equalizing hydrostatic forces on exterior walls. The term "fully enclosed space" also includes crawl spaces.
2. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria:
 - a. a minimum of two openings having a net total area of not less than one (1) square inch for every square foot of enclosed space.

b. the bottom of all openings shall be no higher than one (1) foot above grade.

c. openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

D. Historic Structures

Historic structures undergoing repair or rehabilitation that would constitute a substantial improvement as defined in this ordinance, must comply with all ordinance requirements that do not preclude the structure's continued designation as a historic structure. Documentation that a specific ordinance requirement will cause removal of the structure from the National Register of Historic Places or the State Inventory of Historic places must be obtained from the Secretary of the Interior or the State Historic Preservation Officer. Any exemption from ordinance requirements will be the minimum necessary to preserve the historic character and design of the structure.

E. Accessory structures

Structures accessory to a principal building need not be elevated or floodproofed to remain dry, but shall comply, at a minimum, with the following requirements:

1. the structure shall not be designed or used for human habitation, but shall be limited to the parking of vehicles, or to the storage of tools, material, and equipment related to the principal use or activity.
2. floor area shall not exceed 600 square feet.
3. The structure will have a low damage potential.
4. the structure will be located on the site so as to cause the least obstruction to the flow of flood waters.
5. power lines, wiring, and outlets will be elevated to the regulatory flood elevation.
6. permanently affixed utility equipment and appliances such as furnaces, heaters, washers, dryers, etc. are prohibited.
7. sanitary facilities are prohibited.
8. the structure shall be adequately anchored to prevent flotation, collapse, and lateral movement and shall be designed to automatically provide for the entry and exit of floodwater for the purpose of equalizing hydrostatic forces on the walls. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria:
 - a. a minimum of two openings having a net total area of not less than one (1) square inch for every square foot of enclosed space.

- b. the bottom of all openings shall be no higher than one (1) foot above grade.
- c. openings may be equipped with screens, louvers, etc. or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

Section 5.03 Design and Construction Standards

The following minimum standards shall apply for all construction and development proposed within any identified floodplain area:

A. Fill

1. If fill is used, it shall:

- a. extend laterally at least fifteen (15) feet beyond the building line from all points;
- b. consist of soil or small rock materials only - Sanitary Landfills shall not be permitted;
- c. be compacted to provide the necessary permeability and resistance to erosion, scouring, or settling;
- d. be no steeper than one (1) vertical to two (2) horizontal feet unless substantiated data justifying steeper slopes are submitted to, and approved by the Floodplain Administrator; and
- e. be used to the extent to which it does not adversely affect adjacent properties.

B. Drainage Facilities

Storm drainage facilities shall be designed to convey the flow of storm water runoff in a safe and efficient manner. The system shall ensure proper drainage along streets, and provide positive drainage away from buildings. The system shall also be designed to prevent the discharge of excess runoff onto adjacent properties.

C. Water and Sanitary Sewer Facilities and Systems

- 1. All new or replacement water supply and sanitary sewer facilities and systems shall be located, designed and constructed to minimize or eliminate flood damages and the infiltration of flood waters.
- 2. Sanitary sewer facilities and systems shall be designed to prevent the discharge of untreated sewage into flood waters.

3. No part of any on-site waste disposal system shall be located within any identified floodplain area except in strict compliance with all State and local regulations for such systems. If any such system is permitted, it shall be located so as to avoid impairment to it, or contamination from it, during a flood.
4. The design and construction provisions of the UCC and FEMA #348, "Protecting Building Utilities From Flood Damages" and "The International Private Sewage Disposal Code" shall be utilized.

D. Other Utilities

All other utilities such as gas lines, electrical and telephone systems shall be located, elevated (where possible) and constructed to minimize the chance of impairment during a flood.

E. Streets

The finished elevation of all new streets shall be no more than one (1) foot below the Regulatory Flood Elevation.

F. Storage

All materials that are buoyant, flammable, explosive, or in times of flooding, could be injurious to human, animal, or plant life, and not listed in Section 5.04, Development Which May Endanger Human Life, shall be stored at or above the Regulatory Flood Elevation or floodproofed to the maximum extent possible.

G. Placement of Buildings and Structures

All buildings and structures shall be designed, located, and constructed so as to offer the minimum obstruction to the flow of water and shall be designed to have a minimum effect upon the flow and height of flood water.

H. Anchoring

1. All buildings and structures shall be firmly anchored in accordance with accepted engineering practices to prevent flotation, collapse, or lateral movement.
2. All air ducts, large pipes, storage tanks, and other similar objects or components located below the regulatory flood elevation shall be securely anchored or affixed to prevent flotation.

I. Floors, Walls and Ceilings

1. Wood flooring used at or below the Regulatory Flood Elevation shall be installed to accommodate a lateral expansion of the flooring, perpendicular to the flooring grain without causing structural damage to the building.
2. Plywood used at or below the regulatory flood elevation shall be of a "marine" or "water-resistant" variety.

3. Walls and ceilings at or below the regulatory flood elevation shall be designed and constructed of materials that are "water-resistant" and will withstand inundation.
4. Windows, doors, and other components at or below the regulatory flood elevation shall be made of metal or other "water-resistant" material.

J. Paints and Adhesives

1. Paints and other finishes used at or below the regulatory flood elevation shall be of "marine" or "water-resistant" quality.
2. Adhesives used at or below the regulatory flood elevation shall be of a "marine" or "water-resistant" variety.
3. All wooden components (doors, trim, cabinets, etc.) used at or below the regulatory flood elevation shall be finished with a "marine" or "water-resistant" paint or other finishing material.

K. Electrical Components

1. Electrical distribution panels shall be at least three (3) feet above the base flood elevation.
2. Separate electrical circuits shall serve lower levels and shall be dropped from above.

L. Equipment

Water heaters, furnaces, air conditioning and ventilating units, and other electrical, mechanical or utility equipment or apparatus shall not be located below the regulatory flood elevation.

M. Fuel Supply Systems

All gas and oil supply systems shall be designed to prevent the infiltration of flood waters into the system and discharges from the system into flood waters. Additional provisions shall be made for the drainage of these systems in the event that flood water infiltration occurs.

N. Uniform Construction Code Coordination

The Standards and Specifications contained 34 PA Code (Chapters 401-405), as amended and not limited to the following provisions shall apply to the above and other sections and sub-sections of this ordinance, to the extent that they are more restrictive and supplement the requirements of this ordinance.

International Building Code (IBC) 2009 or the latest edition thereof:
Secs. 801, 1202, 1403, 1603, 1605, 1612, 3402, and Appendix G.

International Residential Building Code (IRC) 2009 or the latest edition thereof:
Secs. R104, R105, R109, R322, Appendix E, and Appendix J.

Section 5.04 Development Which May Endanger Human Life

A. In accordance with the Pennsylvania Flood Plain Management Act, and the regulations adopted by the Department of Community and Economic Development as required by the Act, any new or substantially improved structure which:

1. will be used for the production or storage of any of the following dangerous materials or substances; or,
2. will be used for any activity requiring the maintenance of a supply of more than 550 gallons, or other comparable volume, of any of the following dangerous materials or substances on the premises; or,
3. will involve the production, storage, or use of any amount of radioactive substances;

shall be subject to the provisions of this section, in addition to all other applicable provisions. The following list of materials and substances are considered dangerous to human life:

- Acetone
- Ammonia
- Benzene
- Calcium carbide
- Carbon disulfide
- Celluloid
- Chlorine
- Hydrochloric acid
- Hydrocyanic acid
- Magnesium
- Nitric acid and oxides of nitrogen
- Petroleum products (gasoline, fuel oil, etc.)
- Phosphorus
- Potassium
- Sodium
- Sulphur and sulphur products
- Pesticides (including insecticides, fungicides, and rodenticides)
- Radioactive substances, insofar as such substances are not otherwise regulated.

B. Within any Floodway Area, any structure of the kind described in Subsection A., above, shall be prohibited. Where permitted within any Identified Floodplain Area, any new or substantially improved residential structure of the kind described in Section 5.04 (A), above, shall be elevated to remain completely dry up to at least one and one half (1 ½) feet above base flood elevation and built in accordance with Sections 5.01, 5.02 and 5.03.

C. Where permitted within any Identified Floodplain Area, any new or substantially improved non-residential structure of the kind described in Section 5.04 (A) above, shall be built in accordance with Sections 5.01, 5.02 and 5.03 including:

1. elevated, or designed and constructed to remain completely dry up to at least one and one half (1 ½) feet above base flood elevation, and
2. designed to prevent pollution from the structure or activity during the course of a base flood.

Any such structure, or part thereof, that will be built below the regulatory flood elevation shall be designed and constructed in accordance with the standards for completely dry floodproofing contained in the publication "Flood-Proofing Regulations (U.S. Army Corps of Engineers, June 1972 as amended March 1992), or with some other equivalent watertight standard.

Section 5.05 Special Requirements for Subdivisions and Development

All subdivision proposals and development proposals containing at least 50 lots or at least 5 acres, whichever is the lesser, in Identified Floodplain Areas where base flood elevation data are not available, shall be supported by hydrologic and hydraulic engineering analyses that determine base flood elevations and floodway information. The analyses shall be prepared by a licensed professional engineer in a format required by FEMA for a Conditional Letter of Map Revision and Letter of Map Revision. Submittal requirements and processing fees shall be the responsibility of the applicant.

Section 5.06 Special Requirements for Manufactured Homes

A. Where permitted within any Identified Floodplain Area, all manufactured homes, and any improvements thereto, shall be:

1. placed on a permanent foundation;
2. elevated so that the lowest floor of the manufactured home is at least one and one half (1 ½) feet above base flood elevation;
3. and anchored to resist flotation, collapse, or lateral movement.

B. Installation of manufactured homes shall be done in accordance with the manufacturers' installation instructions as provided by the manufacturer. Where the applicant cannot provide the above information, the requirements of Appendix E of the 2009 "International Residential Building Code" or the "U.S. Department of Housing and Urban Development's Permanent Foundations for Manufactured Housing," 1984 Edition, draft or latest revision thereto and 34 PA Code Chapter 401-405 shall apply.

C. Consideration shall be given to the installation requirements of the 2009 IBC, and the 2009 IRC or the most recent revisions thereto and 34 PA Code, as amended where appropriate and/or applicable to units where the manufacturers' standards for anchoring cannot be provided or were not established for the proposed unit(s) installation.

Section 5.07 Special Requirements for Recreational Vehicles

A. Recreational vehicles in Zones A, A1-30, AH and AE must either:

1. be on the site for fewer than 180 consecutive days, and
2. be fully licensed and ready for highway use,
- or
3. meet the permit requirements for manufactured homes in Section 5.06.

ARTICLE VI. ACTIVITIES REQUIRING SPECIAL PERMITS

Section 6.01 General

In accordance with the administrative regulations promulgated by the Department of Community and Economic Development to implement the Pennsylvania Flood Plain Management Act, the following activities shall be prohibited within any Identified Floodplain Area unless a Special Permit has been issued by the Township of Schuylkill:

- A. The commencement of any of the following activities; or the construction, enlargement, or expansion of any structure used, or intended to be used, for any of the following activities:
 1. Hospitals
 2. Nursing homes
 3. Jails or prisons
- B. The commencement of, or any construction of, a new manufactured home park or manufactured home subdivision, or substantial improvement to an existing manufactured home park or manufactured home subdivision.

Section 6.02 Application Requirements for Special Permits

Applicants for Special Permits shall provide five copies of the following items:

- A. A written request including a completed Permit Application Form.
- B. A small scale map showing the vicinity in which the proposed site is located.
- C. A plan of the entire site, clearly and legibly drawn at a scale of one (1) inch being equal to one hundred (100) feet or less, showing the following:
 1. north arrow, scale and date;
 2. topography based upon the North American Vertical Datum (NAVD) of 1988, showing existing and proposed contours at intervals of two (2) feet;

3. all property and lot lines including dimensions, and the size of the site expressed in acres or square feet;
4. the location of all existing streets, drives, other access ways, and parking areas, with information concerning widths, pavement types and construction, and elevations;
5. the location of any existing bodies of water or watercourses, buildings, structures and other public or private facilities, including railroad tracks and facilities, and any other natural and man-made features affecting, or affected by, the proposed activity or development;
6. the location of the floodplain boundary line, information and spot elevations concerning the base flood elevation, and information concerning the flow of water including direction and velocities;
7. the location of all proposed buildings, structures, utilities, and any other improvements; and
8. any other information which the municipality considers necessary for adequate review of the application.

D. Plans of all proposed buildings, structures and other improvements, clearly and legibly drawn at suitable scale showing the following:

1. sufficiently detailed architectural or engineering drawings, including floor plans, sections, and exterior building elevations, as appropriate;
2. for any proposed building, the elevation of the lowest floor (including basement) and, as required, the elevation of any other floor;
3. complete information concerning flood depths, pressures, velocities, impact and uplift forces, and other factors associated with the base flood;
4. detailed information concerning any proposed floodproofing measures;
5. cross section drawings for all proposed streets, drives, other accessways, and parking areas, showing all rights-of-way and pavement widths;
6. profile drawings for all proposed streets, drives, and vehicular accessways including existing and proposed grades; and
7. plans and profiles of all proposed sanitary and storm sewer systems, water supply systems, and any other utilities and facilities.

E. The following data and documentation:

1. certification from the applicant that the site upon which the activity or development is proposed is an existing separate and single parcel, owned by the applicant or the client he represents;